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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/609,145 | 06/27/2003 | Paul Leblans | 27500-158 | 6720 |

7590

01/23/2006

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| EXAMINER |
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MALEVIC, DJURA

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| ART UNIT | PAPER NUMBER |
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2884

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,145

Applicant(s)

LEBLANS ET AL.

Examiner

Djura Malevic

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on 11/02/05 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of 6/27/2003 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

The indicated allowability of claims 41- 44, 49 - 52, 58 and 65 is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Trissel *et al.* (US Patent 5,723,865).

With regards to claims 1 - 6, Trissel discloses an image storage panel comprising a binderless needle-shaped stimuable phosphor (Col. 6, Line 29), wherein the substrate has a roughness of less than 100 angstroms (claim 1) and a reflectivity of more than 98 percent (Col. 5, Line 38).

Art Unit: 2884

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trissel *et al.* in view of Kano *et al.* (US Patent 4,741,993).

With regards to claims 7 – 12, Trissel discloses the image storage screen as claimed in claims 1-6 but does not expressly disclose the phosphor as CsX:Eu wherein X is selected from Br and Cl. However, the phosphor as claimed is known for exhibiting efficient fluorescence when irradiated with a stimulating excitation light. References such as Kano teach the claimed formula (Col. 7, Line 62 – Col. 8, Line 34). Trissel and Kano are analogous art because they are both from the same field of endeavor, radiation storage panels.

Thus, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Trissel to include the specific phosphor formula such as that taught by Kano in order to exhibit stimulated fluorescence after irradiation (Col. 7, Line 62 – Col. 8, Line 34).

Claims 13 - 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trissel in view of Kano and in further view of Okada *et al.* (US 20020162965 A1).

With regards to claims 13 – 24, Trissel discloses the image storage screen as claimed in claims 1-12 but does not expressly disclose the substrate as an amorphous carbon layer overcoated with a reflecting layer. Trissel discloses the substrate as a polycarbonate layer overcoated with a reflective layer (Col. 5, Line 1++). Trissel further discloses that polycarbonate was preferred for the substrate because of

Art Unit: 2884

its coefficient of thermal expansion in addition to its structural rigidity. Okada teaches an amorphous carbon layer overcoated with a reflective layer wherein the amorphous carbon is thicker than other materials improving the structural rigidity and the thermal expansion coefficient is similar with that of the polycarbonate of Trissel [0010 –0015].

Thus, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Trissel to include an amorphous layer overcoated with a reflective layer as the substrate such as that taught by Okada in order to improve the overall structural rigidity of the substrate [0010 –0015] and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With regards to claims 25 –36, Trissel disclose the reflecting layer as an aluminum layer (Col. 5, Line 28). Note, Okada also teaches that the reflecting layer is an aluminum layer [0015].

With regards to claims 37- 44, Trissel discloses the image storage screen as claimed in claims 1 – 36 but does not expressly disclose the screen wherein a moisture-repellent layer is present in-between said substrate or coated as an outermost layer. Oskade teaches a protective layer 113, which has a high moisture resistance [0078,0183,0188], wherein the protective layer is in-between said substrate and coated as an outermost layer (Fig 1).

Thus, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Trissel to include the protective layer such as that taught by Oskade in order to prevent moisture from contaminating the panel.

With regards to claims 45 – 52, Oskade teaches that the protective layer is a parylene layer [0078,0183,0188].

Art Unit: 2884

With regards to claims 53 – 66, Trissel discloses that the image screen is a digital mammography device (Col. 2, Line 42).


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fleig *et al.* (US Patent 5,466,947) teaches a protective layer consisting of parylene.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djura Malevic whose telephone number is 571.272.5975. The examiner can normally be reached on Monday - Friday between 8:30am and 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. *Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000

Djura Malevic

Patent Examiner

Art Unit 2884

571.272.5975

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